ABSTRACT
        The literature on program evaluation contains
numerous suggestions that evaluative information is frequently
underutilized or inappropriately utilized by administrators. This
paper reviews the literature on utilization with a view toward
identifying workable strategies for optimizing appropriate use.
Specific recommendations to evaluators include the following: (1)
concentrate evaluation efforts on the highest priority information
needs of specific administrators, even if these needs require work
beyond that mandated by external funding agencies; (2) identify some
evaluation issues on the basis of emphatic and proactive anticipation
of administrators' future information needs; (3) tailor information
studies to meet the different needs of various evaluation audiences;
(4) acknowledge the subjective elements in evaluation work; (5)
understand the politics of agencies and attempt to meet the political
needs of involved persons; (6) emphasize both formative process
evaluation data and summative product evaluation data; and (7)
demonstrate a concern about the needs of program staff and the
program's clients to project personnel and administrators. An effort
is made to synthesize previous thought and empirical research on
utilization. Weaknesses in previous naturalistic and simulation use
studies are discussed. A research agenda for the future is presented.
(Author/RL)

ED199271

EVALUATION UTILIZATION:

A LITERATURE REVIEW AND RESEARCH AGENDA

Bruce Thompson

University of New Orleans   70122

Jean A. King

Tulane University   70118

TM 810 170

2

ABSTRACT

The literature on program evaluation contains numerous suggestions that evaluative information is frequently underutilized or inappropriately utilized by administrators. This paper reviews the literature on utilization with a view toward identifying workable strategies for optimizing appropriate use. An effort is made to synthesize previous thought and empirical research in utilization. Weaknesses in previous naturalistic and simulation use studies are discussed. A research agenda for the future is presented.

A sense of frustration permeates the literature (King, Thompson & Pechman, 1981) on the use of program evaluation information. As Weiss (1972, p. 318) notes, evaluation's

> primary justification is that it contributes to the rationalization of decision-making. Although it can serve such other functions as knowledge-building and theory-testing, unless it gains serious hearing when program decisions are made, it fails in its major purpose.

However, it is clear that "there is something basically wrong with evaluation" (Orlandi & Conslave, 1977, p. 3). House (1972, p. 4) argues that "even under favorable circumstances evaluation data might account for only 20% of a decision."

Reading the literature on use of evaluative information can contribute to chronic depression. For example, Haenn (1980, p. 2) concludes that "evaluation results generally have served neither as a means of judging program results nor as a guide to program improvement." Williams and Evans (1969, p. 453) conclude that, "in the final analysis, the test of the effectiveness of outcome data is its impact on implemented policy. By this standard, there is a dearth of successful evaluation studies." Alkin and Daillak (1979, p. 41) conclude that "there have been great hopes for evaluation, not only among evaluators themselves, but also among other educators, elected officials, and the public. Yet these hopes have dimmed." Worthen and Sanders (1973, p. 1) conclude that "evaluation is one of the most widely discussed but little used processes in today's educational systems." Wholey, Scanlon, Duffy, Fukumoto, and Vogt (1970, p. 46) conclude that "the

recent literature is unanimous in announcing the general failure of evaluation to affect decision-making in a significant way." Rippey (1973, p. 9) concludes that "at the moment, there seems to be no evidence that evaluation, although the law of the land, contributes anything to educational practice other than headaches for the researcher, threats for the innovators, and depressing articles for journals devoted to evaluation." Finally, Stake (1973, p. 314) concludes that "we do not know whether or not evaluation is going to contribute more to the problems of education or more to the solutions."

This characterization apparently applies equally well to judicial (Saks, 1980) and legislative settings (Brandl, 1980; Mitchell, 1980). Unfortunately, several directors of evaluation from local education agencies (LEA's) have suggested that the characterization may generalize to those settings too:

> In an ideal world we wouldn't have to worry about utilization. Educators would be eagerly awaiting our findings and would promptly rush to put them into practice. I don't need to tell you that isn't happening (Holley, 1979, p. 2).

> The apparent nonuse of evaluation findings is one of the most vexing problems associated with the practice of evaluation in the public school setting. Even in districts with active evaluation sections it is difficult to establish a direct correspondence between evaluation results and educational decisions (Novak, 1977, p. 1).

> All LEAs, with possibly a few exceptions, can point to their volumes of research and evaluation verbiage setting on the shelves of district administrators being used for little else than a door stop, swatting flies, or any of the other various and sundry purposes for which research is used in the public schools (Kilbourne & DeGracie, 1979, p. 2).

The Tragedy of Non-Use

The non-use of evaluative information, when that use would be appropriate, is tragic. Non-use represents an enormous waste of effort. As Datta (1979, p. 22) notes, "considerable effort is involved in conducting almost any evaluation: in identifying the evaluation question, in designing the study, in overcoming the obstacles to conducting an evaluation and protecting it methodologically from uninterpretability."

Non-use also represents waste of monies. For example, in 1974 direct expenditures on non-defense evaluation projects by the federal government alone amounted to $146 million (Kelezo, 1974). Surprisingly, "more and more money is being invested in evaluation studies at the same time that we are questioning their results and effects" (Raizen, 1978, p. 3). The indirect costs of non-use, when ineffective programs are not modified or discontinued, are even more staggering:

> The utilization of research crisis concerns the spending of billions of dollars in private and public funds to fight problems of poverty, disease, joblessness, mental anguish, crime, hunger and inequality (Patton, 1978, p. 12).

However, the greatest tragedy is that non-use means that the clients of educational and social programs receive less than optimally effective help. Failure to utilize evaluative information is tragic because, as Wise (1980, p. 16) notes, "no one else is given the resources and time to question, observe, assess, weigh, probe, and reflect that the evaluator is given."

Purposes of the Paper

Weiss (1979, p. 1) summarizes the literature on evaluation use in this manner:

> Studying the effects of social science research and evaluation used to be a problematic enterprise, and anyone writing on the subject had to justify its importance... We can [now] take the significance of the questions for granted. The challenge is to get on with the job.

This paper's purposes are to synthesize previous theoretical and empirical findings regarding evaluation use and to propose an agenda for future research on evaluation use.

CAVEAT: THE RATIONALITY OF NON-USE

It must be acknowledged, however, that the non-use of evaluative information can be quite rational, for a number of reasons. For example, it is clear that some evaluation studies are poorly done and do not merit use. Ironically, there is empirical evidence (Alkin, Kosecoff, Fitz-Gibbon & Seligman, 1974, p. 48) that poorer quality evaluations may be performed on projects which quality evaluations could most help to improve. At any rate, as Guba and Stufflebeam (1970, p. 6) observe:

> Many researchers make wrong assumptions about what an evaluation study should accomplish, and... [then] based on thes ┐roneous assumptions, researchers foist bad au.ice upon unsuspecting and unsophisticated practitioners. As a consequence, evaluations are usually useless, and practitioners

are largely justified in the jaundiced view they typically have taken about evaluation and its utility.

A common situation which justifies non-use occurs when evaluators do not attend to a program's actual degree of implementation. As Guttentag and Struering (1975, p. 4) observe, "obvious though it may seem, evaluations continue without either raising or answering the primary question: 'Does the program [even] exist?'" Unfortunately, as Williams and Elmore (1976, p. xii) note, "ignoring implementation has been equally disastrous for research and analysis." This situation continues despite the availability of several stratgies for measuring implementation prior to comparison of results for program participants and non-participants (Revicki & Rubin, 1980), including most notably the model developed by Hall and Loucks (1977).

Practitioners also often feel that evaluation studies do not merit use because the evaluation results contradict the practitioner's intuitions regarding program impacts. As Guba (1969, p. 1) notes, "for decades the evidence produced by the application of conventional evaluation procedures has contradicted the experential evidence of the practitioner. Innovations have persisted in education not because of the supporting evidence of evaluation but despite it." This frequently occurs when summative evaluations find "no significant differences" associated with a program--certainly a common result--but the practitioner's experience suggests that

the program really did substantially alter classroom life. As Shapiro (1973, p. 527) argues, "while it is important to try to explain negative [i.e., statistically non-significant summative] test results, it is far more important to account for the disparity between the negative test findings and the clear differences observed in classroom behavior."

There is also evidence that non-use is rational, from the practitioner's perspective, since the practitioner may not view the world from within a scientific paradigm, and differences in the evaluator's and the practitioner's perspectives may reduce trust and impede effective communication. As Deal and Rallis (1980, p. 216) explain:

> Theoretically, collaborative relationships require a shared perspective, high trust and power parity. The existing relationship between knowledge producer and user, however, is often characterized by different perspectives, low trust and an asymmetrical distribution of power.

Empirical research makes clear how this situation might occur in public school settings:

> Not only have only 42% of them [LEA evaluation unit heads] not taught, but 70% have not run a school. This means that even when evaluation heads have teaching backgrounds, they do not take the typical advancement route to the central office (Lyon, Doscher, McGranahan & Williams, 1978, p. 66).

There is also evidence that non-use may be rational when administrators invoke latent institutional or personal goals, which are quite distinct from formal program goals, as standards for determining program merit. For example,

Granville (1977, p. 2) explains that "a decision maker, in addition to considering whether or not a program has fulfilled its manifest objectives, must also consider its fulfillment of latent objectives, such as enhancing the agency's prestige or expanding its resources." It is also important to remember that administrators may have their own survival needs which can affect their use of evaluative information:

> High level administrative tenure is quite short as is that of elected officials. Policy makers must demonstrably show actions [sic] in a short period of time as constituencies are not willing to wait (Mathis, 1980, p. 2).

Finally, it is important albeit painful to acknowledge that some evaluation studies were never meant to be used. As Alkin (1976, p. 16) explains, this is frequently the case when an externally mandated evaluation is involved:

> Many practicing school administrators... believe that evaluation is simply an event that leads to compliance with various agency requirements. There is no real expectation that major basic decisions will be made. The name of the ballgame is simply not to get "dinged" by the governmental agency.

Alkin (1980a, p. 3) more recently made the same point by way of analogy:

> And, to pursue the analogy, suppose the host at this garden party should insist that each of the guests periodically rate the quality of the party, or the drinks, or the food etc.--it can't really be expected to have much impact. This somewhat peculiar, externally imposed requirement will be tolerated as part of the "price of admission," so to speak, but it won't really change the behavior of individuals.

Indeed, deliberate non-use is thoroughly rational if programs

are not conceptualized well enough to possess "evaluability" (Rutman, 1977).

Taken together, these four caveats suggest two important conclusions. First, we must not expect too much of evaluation, at least as it is currently practiced (Daillak, Alkin & White, 1978, p. 10). McClean (1979, p. 26, emphasis in original) helps to put this matter into perspective:

> Schools are overdetermined; that is, they are shaped by many forces, more even than are necessary to make them the way they are. Take away or change one force and nothing in a school may change.

Stevens and Tornatzky (1980, p. 340) concur, although for a different reason. They argue that underutilization should be expected, since "underutilization of knowledge is actually quite common with an innovation such as program evaluation."

Second, and more important, however, it must be remembered that

> Evaluation has been ignored, misused, and overused, as well as appropriately used in policy and decision making. Our task is to make more appropriate uses of evaluative information (Braskamp & Brown, 1980, p. x).

Thus Caplan (1980, p. 5) argues that "there is a real danger in uncritically accepting utilization as desirable or in being oversold on its value. Not all utilization is good and not all nonutilization is bad." Similarly, Davis and Salasin (1975, p. 622, emphasis in original) argue that "it is a clear lesson that concern over utilization must emphasize appropriate use rather than just greater use."

THE CONCEPT OF USE

Underestimation of Use Levels

Recently several authors have suggested that the extent of evaluation use may be underestimated in the literature (cf. Datta, 1978, p. 3). For example, Wise (1978, p. 24) has suggested that "if there is an evaluation utilization problem, it is not that decision-makers do not use the information they receive, it is that evaluators cannot easily see their information being used in the incrementalism of real-world decision-making." Daillak, Alkin, and White (1978, p. 1) concur, noting that "the few empirical studies that have been conducted, however, seem to present a picture which is less gloomy than many of the more speculative articles; they suggest that evaluation can have impact upon decision-making, although not necessarily the kind of dramatic go/no go influence some would wish."

There is empirical evidence that administrators do value evaluative information, although they might want changes in the methodology of some evaluations. For example, Alkin, Kosecoff, Fitz-Gibbon, and Seligman (1974, p.28, emphasis in original) report that "project directors found evaluations most useful in identifying possible problem areas... No project director indicated that he would prefer not to have an evaluator on the project." However, another important empirical study suggests that results of use studies generally must be interpreted with some caution:

The results of this study seemed at first to raise

some doubt about the fundamental assumption underlying the study: the assumption that evaluation is an exercise in the service of decision-makers. While all those interviewed were, without exception, decision-makers in one capacity or another, their requests for reports were not always connected with the decisions they had to make. Frequently, they wanted the reports so as to inform the people above them or below them in the administrative heirarchy of their government agency (Brickell, Aslanian & Spak, 1974, p. 56).

In any case, it is clear that the quality of utilization research and of estimates of use levels presumes an acceptable definition of use. As Tittle (1977, p. 3) notes, "papers concerned with the analysis of impact and impact assessment methodology have not always dealt with the problem of how to define impact." Patton (1978, p. 32) goes so far as to argue that "the predominant image of nonutilization that characterizes much of the commentary on evaluation research can be attributed in substantial degree to a definition of utilization that is too narrow in its emphasis on seeing immediate, direct, and concrete impact on program decisions." Thus Alkin (1980a, p. 5) concludes that:

> From among these continuing strains of non-utilization, there now seems to be emerging a new methodolgy which points to instances in which evaluation information is in fact used. Moreover, these new results are not really contradictory with prior data on utilization; the [new] evidence on utilization rests upon a broader definition of utilization and different categories of evaluative information."

Similarly, Alkin, Daillak, and White (1979, p. 16, emphasis in original) argue that

> taken together, the studies and our observations and experiences suggest to us that evaluation can make a

difference, that it does so more often than the published critiques suggest, that some school districts characteristically produce a high proportion of useful evaluations, and that some evaluators have acquired skills that allow them to carry out technically competent <u>and</u> programmatically influential evaluations.

In a fine piece on utilization, Weiss (1979, p. 13, emphasis removed) argued that "until we resolve questions about the definition of use, we face a future of non-comparable studies of use and scant hope of cumulative understanding of how evaluation and decision-making intersect." Most of the agitation for an improved conceptualization of use stems from a growing recognition that use generally does not take very direct or dramatic forms. as Alkin (1979, p. 3) suggests, "it is not enough to ask in September what the effects of the previous academic year's evaluation have been; as our illustration suggests, it may take two or three or more years before major program changes occur." Thus Andrews (1979, p. 18) concluded that, "Of great importance is the finding that evaluations tend to have small incremental impacts on the programs; the 'big bang' theory of evaluation impact should apparently be discarded."

Types of Use

The literature reflects a growing recognition that subtle but still important types of use may be more typical than are direct, radical program changes (Brown & Braskamp, 1980, p. 92). As Weiss (1977, p. 534) suggests, "government officials use research less to arrive at solutions than to

orient themselves to problems... And [even] much of this use is not deliberate, direct, targeted, but a result of long term percolations of social science concepts, theories and findings into the climate of informed opinion."

Several conceptualizations of types of use have been offered. for example, Fullan (1979) has suggested that information may result in changes in values, in understanding, in roles, in organization, or in materials. Some authors use different terms for types of use which apparently involve the same processes. These terms and the concepts they represent are presented in Table 1. As Weiner, Rubin, and Sachse (1977, p. 12) observe, "these categories are neither mutually exclusive nor exhaustive."

"Instrumental" use represents the more traditional view of use of evaluative information, e.g., the information results in go/no go decisions regarding program termination. This type of use rarely occurs, although some examples of "instrumental" use can certainly be identified (cf. Alkin, Daillak & White, 1979, p. 224). "Conceptual" use is in practice a more common form of use. An example of conceptually targeted evaluation is provided by Cook (1974). Cook argued that "Sesame Street" should not be evaluated merely on the basis of the program's impacts on the reading readiness of children. It was suggested that the program's impacts on the gaps in reading readiness between lower socio-economic status children and other children should also be considered; this argument changed the conceptual

Table 1

Types of Use

Term	Synonomous Labels	Definition
"Instrumental" (Rich, 1977)	"Allocative" (Weiner et al., 1977, p. 12)	"results lead to a decision about program allocations, expansion, and elimination" (Braskamp, 1980, p. 1)
"Conceptual" (Rich, 1977)	"Appreciative" (Weiner et al., 1977, p. 14) "Enlightenment" (Braskamp, 1980, p. 1)	"influencing a policymaker's thinking about an issue without putting information to any specific, documentable use" (Rich, 1977, p. 200)
"Symbolic" (Weiner et al., 1977, p. 13)	"Persuasive"	"drawing on evaluation evidence in attempts to convince others to support a political position, or to defend such a position from attack" (Leviton & Hughes, 1979, p. 7)
"Ritualistic" (Braskamp, 1980, p. 1)	"Anticipatory"	"the impact that evaluation has upon the diligence exhibited by program participants" (Weiner et al., 1977, p. 12)

16

frame of reference for evaluating the program. Clearly, "conceptual" use of evaluation can have dramatic impacts at times. It is also clear that sometimes "it is difficult to determine where conceptual use ends and instrumental use begins" (Leviton & Hughes, 1979, p. 10).

"Symbolic" use is common and can take several forms. For example, program personnel who solicit evaluation only to satisfy external funding agencies are engaging in "symbolic" use; the evaluation is only used to persuade the agency that the game is being played according to the rules. Lenihan (1977) provides an actual example of "symbolic" use. An evaluation demonstrated that several benefits could be realized by installing phones in a jail for inmate use. The evaluation's information was initially ignored.

> The [inmate] riot changed all that. When the time came, when overcrowding reached a breaking point, the knowledge produced from this research was put to use. It was not a sufficient cause for change, but in the end it did make a contribution (Lenihan, 1977, p. 583).

The evaluation provided a face-saving justification for installing phones in the jail, although the actual motives for doing so might have been less than scientific. Knorr (1977) indicates that roughly 10% of surveyed administrators report they have used evaluations to legitimize decisions.

"Ritualistic" use is a misnomer, since the use can have deliberate and important program impacts. Presumably evaluation affects the behaviors of program personnel because

they know program processes and impacts are being measured. Surprisingly, the results of this type of use have not yet been empirically investigated.

Although these conceptualizations of use may accurately reflect "real world" evaluation dynamics, the shift from the more traditional view of use does produce some problems. An expanded view of use makes it more difficult to study use phenomena. For example, "it is literally impossible 'to prove' [conceptual] use" (Fullan, 1980, p. 44). Nevertheless, the trade-off of measurability in return for a more realistic perspective on use is probably worthwhile. As Braskamp and Brown (1980, p. viii) have argued, "although the expanded definition makes utilization less dramatic and more difficult to explicitly measure and demonstrate, it represents a view of evaluation in which the role of human interaction in the communication process is given more credence."

MODELS OF "REAL WORLD" DECISIONING

Just as the definition of evaluation use affects the assessment of the levels of use, perceptions of how decisions are made also affect judgments of the quality of use. As Wise (1978, p. 6) explains, "referring to administrators as 'decision-makers' and to what they do as 'decision-making' may have been a first step in creating the utilization problem, for we expect to see decisions being made by someone called a decision-maker." Thus many evaluators presume that evaluation ought to be used, because its evidence is rational. However,

as Weiner, Rubin, and Sachse (1977, p. 4) note, "interestingly, their [evaluators'] recommendations are based upon a faith in rationality, not upon evidence concerning the factors influencing the utilization of evaluative information." As Caplan (1980, p. 4) suggests, "obviously, utilization is not a simple process--bureaucratic, ethical, attitudinal, and social considerations take precedence over the value of information in its own right."

Hayman (1979, p. 11) argues that the educational environment can be chaotic; consequently, administrators may only be able to invest careful and thorough thought in a few of their most critical decisions:

> [The "turbulent field" type of environment, one of four conceptualized environmental types,] appears to correspond to conditions facing education today. In a turbulent field, the accelerating rate and complexity of interactive effects exceeds the component systems' capacities for prediction and, hence, control of the compounding consequences of their actions.

Thus Simon (1957, p. 204) suggests that administrators may be forced to engage in "satisficing," i.e., the process "of finding a course of action that is 'good enough.'" "Satisficing" is tenable because administrators believe they can change most courses of action if decisions later prove to be seriously mistaken.

Thus, evaluators must recognize that administrators at times may not behave "rationally," i.e., administrators' decisions may be rational only when they are viewed from within

the administrators' frames of reference. Of course, it is also true that some administrators are less rational than others. For better or worse, some "decision-makers pride themselves on 'shooting from the hip' and would not have it any other way" (Guba, 1969, p. 17).

THE LITERATURE ON USE

Overview

A general consensus that there is a shortage of empirical use studies has emerged in the literature. For example, Davis and Salasin (1975, p. 626) reported that "a review of 1,200 references on [knowledge] utilization contained only 2 1/2% which pertained to evaluation, again even in the broadest sense." Furthermore,

> While much has been said and written about the problems besetting evaluation and about the underutilization of evaluation information, very few empirical studies of evaluation utilization have been conducted. Most of the literature is anecdotal in form (Alkin & Daillak, 1979, p. 41).

Shapiro (1979, p. 1) agrees: "The literature on utilization, both applied and theoretical, tends to be ad hoc and nonrigorous." Cook (1978, p. 14) has suggested that "the quality and imaginativeness of most (but not all) utilization studies leaves something to be desired."

Of course, it is difficult to conduct good utilization research. For example, as Stevenson (1979, p. 3) notes, "verbal acceptance of findings may not be followed by appropriate action. Verbal rejection of findings may be

followed by actions which imply acceptance." Nevertheless, Caplan (1980, p. 9) hopefully overstates the case when he says that "there are no tested propositions or even a substantial consensus as to what will work" in promoting use.

Factors Affecting Use

The literature does indicate that evaluation information is most likely to be used in either of two situations. Evaluators might wish to invest special effort in their work when these situations exist. First, evaluative information is most likely to be used when a program is novel and administrators cannot rely extensively on their experential backgrounds in making judgments. Matuszek and Holley (1977) report that, in their experience,

> The [evaluation] office has tended to get the most response to its evaluation information when it really does represent something the decision maker doesn't already know. Thus, principals generally believe that they have a fairly good feel for teacher attitudes in their schools; a teacher attitude questionnaire is most likely either to confirm their feelings or to be rejected; student pattern of course choices (for example), on the other hand, is less likely to be at their fingertips.

An empirical study by Granville (1977, p. 6) corroborates this conclusion:

> The best way to express the magnitude of these effects is to say that the Political and Social Influence factors swayed principals by about one and a half intervals on a decision scale that ran across six intervals. The Objective Evidence factor had a separate effect of about one interval under the Novel program condition. Under the Routine program condition, as I mentioned, objective evidence had virtually no effect.

Second, the literature suggests that evaluative information is most likely to be used when only moderate changes in the program are required and the environment is not extremely politicized. As Meltsner (1976, p. 9) indicates, there are wide variations across programs re arding the environments in which the programs operate:

> Sometimes the politics of a policy area are open and conflict ridden; sometimes they are closed, involving technical issues and technical men. Some policy problems have a dimension of crisis to them. Others are chronic; they never seem to go away and are subject to incremental solutions.

Consequently, Weiss (1972, p. 320) reports that "use of evaluation appears to be easiest when implementation implies only moderate alterations in procedure, staff deployment, or costs, oi where few interests are threatened."

LESS EFFECTIVE STRATEGIES FOR OPTIMIZING USE

The literature includes several recommendations for optimizing use which it now appears may not be particularly helpful. For example, some evaluators consider evaluation models (cf. Stufflebeam, Foley, Gephart, Guba, Hammond, Merriman & Provus, 1971) panaceas which can be used to create use. As Brown (1980, p. 4) notes,

> For a time, it was hardly respectable to be an evaluator without having your own model. You at least had to be a disciple of a proponent of a new model that was on the "cutting edge" in order to maintain some semblance of self-esteem. It is interesting to observe that there were very few wounds inflicted by that "cutting edge."

Due to these attachments to evaluation models, "the past few

years have witnessed the development and proliferation of myriad evaluation models" (Thompson, 1980, p. 59). Indeed, this proliferation leads to periodic efforts to synthesize the wide array of evaluation models (cf. Steele, 1973).

Today, however, it is clear that evaluation models such as the CIPP model (Stufflebeam et al., 1971), although important aids to earlier efforts at conceptualizing evaluation, are less important when viewed as guides for evaluator behavior. Thus, based on his case studies of evaluative practice, Alkin (1979, p. 7, emphasis in original) found that "none of the five cases involved the application of a formal evaluation model." This finding was not an artifact of evaluator ignorance regarding the precepts of several evaluation models (Alkin, Daillak & White, 1979, p. 240).

More recently it has been suggested that evaluative information would be more widely used if evaluators and administrators worked more closely together to formulate evaluation designs. For example, Suchman (1972, p. 67) has suggested that program goals must be explicitly specified prior to evaluation, because "unless a program can specify what value its activities are seeking to further, whether this be the amelioration of some specific social problem or the advancement of some broad humanistic goal, evaluation becomes meaningless." Similarly, Patton (1978, p. 202) has recommended collaborative development of evaluation designs; "it is crucial that identified decisionmakers and information users participate in

the making of measurement and methods decisions so that they
understand the strengths and weaknesses of the data--and so
that they believe in the data." Finally, Ross (1980, p. 66) has
even suggested that evaluators and administrators should
together specify decision rules in advance of program
implementation; these rules specify what decisions will be
taken if various evaluation results occur.

Unfortunately, these strategies tend to look good on paper
and work poorly in practice. For example, what Patton (1978,
p. 100) has termed the "goals shuffle" can readily destroy
efforts to estimate discrepancies between program goals and
actual program outcomes:

> The goals clarification shuffle involves a sudden
> change in goals and priorities after the evaluator is
> firmly committed to a certain set of measuring
> instruments and to a research design. The
> choreography for this technique is quite simple. The
> top priority program goal is moved two spaces to
> either the right or left and four spaces backward.

Rossi (1972, p. 229, emphasis in original) has argued that what
might be called "methodology shuffles" can also occur if
evaluation results prove to be unpopular:

> It is easy to attack the methodology of any study:
> methodological unsophisticates suddenly become
> experts in sampling, questionnaire construction,
> experimental design, and statistical analysis, or
> borrow experts for the occasion.

Of course, decision rules tend to become obsolete once either
goals or methodology shuffles have been performed.

In summary, the collaborative identification of goals, methods, and even decision rules is all well and good. However, it is important to recognize that these strategies are most likely to work in situations in which evaluation use is least threatened. More importantly, it must be recognized that these strategies do not themselves directly address the primary reasons why the situation exists in the first place.

PLAUSIBLE STRATEGIES FOR OPTIMIZING USE

The literature also includes some recommendations for optimizing use which, although they are plausible and noteworthy, are easier said than done. For example, Havelock (1968) has suggested that use will be optimized if someone performs a "linking agent" function. Hayman (1979, p. 1, emphasis removed) defines "linkage" as "a process of promoting knowledge utilization in educational organizations, and a 'linking agent' is an individual or group which causes linkage to occur." It may be that evaluation is most likely to occur when an administrator who is unassociated with the evaluation, i.e., is perceived by fellow administrators as being objective, "adopts" an evaluation study and begins pushing for implementation of the study's results. The dilemma, of course, is that to be most credible this process must be spontaneous, so there are no guarantees that this form of linkage will occur. However, this form of linkage may be more likely to occur if the evaluator targets results toward a larger number of administrators.

It has also been suggested that utilization will be optimized if evaluative information is presented to administrators in a timely fashion. Randall (1969, p. 1) portrays what may be a common situation:

> There is a timeworn and oft-recurring spectacle of the frantic but finally productive researcher-evaluator, who rushed into the executive offices with his data analysis finally complete, his report prepared and in hand, only to find that the executives, several months previously, had made the important decisions that locked up the monies and committed the organization for the ensuing months ahead.

Unfortunately, it is not always possible to anticipate when information will be needed in service of decision making. In fact, as Brickell, Aslanian, and Spak (1974, p. 24) note, "he [the administrator] can never know when he will need it [evaluative information]. The process of government decision-making is not so orderly or regular that he can schedule his need for information." It is also important to recognize that timeliness is important for "instrumental" use but may not be so for other types of use (Young & Comptois, 1979).

Finally, Johnston (1978, p. 1) has suggested that it is important to target evaluation toward identified administrators.

> There is a sort of ecology for each educational program, a network of people in different roles who influence (or are influenced by) the outcome of the program being evaluated. If this is true, and research utilization is the goal of the evaluator, then there are multiple audiences for an evaluation, not just the decision-maker who commissioned the evaluation. So the evaluator has a first task of

identifying who these other actors are.

However, this effort can be frustrated by the complexity of the organizational network. As Randall (1969, p. 7) explains, "typically, the decision process in an organization involves a complex network of persons who have varying degrees of influence on the one who may have constituted authority to make any given decision." The situation is further complicated because, as Granville (1978, p. 29, emphasis in original) notes, an evaluation study "has to persuade not just the people who ostensibly make the decisions, but also the people they have to persuade." Thus, Alkin and Kosecoff (1973, p. 3) conclude that "identification of the program's decision maker(s) is perhaps the most elusive variable associated with a decision context."

ESSENTIAL STRATEGIES FOR OPTIMIZING USE

Holism is Crucial

The literature also includes several recommendations for optimizing use which are generally essential to optimizing evaluation use. These recommendations involve identifying evaluation issues, acknowledging evaluation subjectivity, focusing on policy alternatives, and building rapport with administrators and program personnel. However, it is crucial that the evaluator use an holistic approach to adopting these strategies. As Weiner, Rubin, and Sachse (1977, p. 23) argue, "attempts to increase evaluative influence which focus on a few of these factors in isolation and which do not recognize the

highly complex and interactive system of forces constraining evaluator activity are likely to fail to alter the overall effects of the system." Patton (1978, pp. 19-20) concurs, noting that "the overall problem of underutilization of evaluation research will not be solved by compiling and following some long list of evaluation proverbs and axioms."

Issue Identification

Evaluation results will enjoy "instrumental" and "conceptual" use only if the results address issues of concern to administrators. As Alkin, Daillak, and White (1979, p. 238) note, "if the evaluation addresses a pressing concern of a potential user, then the evaluation information is more likely to draw, and hold, the user's attention." Thus Patton (1978, p. 83) goes so far as to suggest enhancing "utilization by focusing on fulfilling one purpose extremely well, so that at least the decisionmakers' [sic] central questions are answered." Alkin and Daillak (1979, p. 47) argue that "evaluators who concentrate on the mandated evaluation tasks run the very real risks of losing the local audiences."

However, it may be difficult to identify the issues which are most important to administrators. For example, in a unique project designed to be particularly responsive to administrators' information needs, Fletcher (1972, p. 15) found that "like teachers, administrators could not often identify kinds of data they could use. And in many cases the kinds they wanted were totally beyond our capacity to provide."

Furthermore, the situation which Ingison (1979, p. 2) observed at the federal level may also occur in local education agencies: "At the [National Science] Foundation (and elsewhere at the federal level, I suspect), the pressure is always on to get the evaluation study set up and brought in quickly (preferably yesterday)." Despite these difficulties, to maximize the liklihood that evaluative information will be used, it is recommended that

> 1. Evaluators should concentrate evaluation efforts on the highest priority information needs of specific administrators, even if these needs require work beyond that mandated by external funding agencies.

Since administrators are not always able to anticipate or articulate future information needs, evaluators "should anticipate questions and be proactive" (Law, 1980, p. 74). Stake (1973, p. 305) makes a similar point: "The evaluator, I think, has a responsibility to snoop around and to guess at what decisions may be forthcoming. He should use these guesses to orient his evaluation plan." Gorham (1970, p. 104) argues that evaluators should "be clairvoyant about forthcoming issues." Meltsner (1976, p. 127) cites the example of "one analyst [who] likes to follow his client around for a week and attend the meetings he does, and the like, to see what 'is hurting the client.'" These arguments suggest that

> 2. Evaluators should identify some evaluation issues on the basis of emphatic and proactive anticipation of administrators' future information needs.

If these anticipated needs do not arise, evaluators need not highlight the results of the inquiries which they initiated. In any case, evaluator credibility should be improved when administrators sense a sincere effort to be responsive, even though this anticipation will not always be precisely accurate.

In addressing evaluation issues evaluators must also take into account the factors which determine the perceived salience of information. For example, as Brown (1973, p. 2) explains, "the question as to when and which levels of information school management needs depends on the length of time a program has been in operation and the degree to which that project overlaps other programs within the school system." An administrator's location within the organizational hierarchy also affects extent of felt need for information (Braskamp, Brown & Newman, 1978, p. 449). Furthermore, organizational position affects the type of information which is required; "those officials who are in a position to control the project from day to day or month to month and who are responsible for exercising such control have a far greater interest in monitoring reports than decision-makers at higher executive levels" (Brickell, Aslanian & Spak, 1974, p. 59). Evaluators should also remember that "research is often most useful to those who do not have the authority to promote a policy, i.e., teachers" (Hamilton, 1980,

p. 7). In short,

---
3. Evaluators must tailor information studies to
   meet the different needs of various evaluation
   audiences.

This may entail steps such as writing several versions of
reports or conducting "extra" evaluation inquiries.

Evaluation Subjectivity

Many evaluators like to believe that evaluation is
objective, apolitical, and appropriately empirical. All three
of these beliefs can take the form of myths which hinder
evaluation use. For example, Wilensky and Lebeaux (1958,
p. 20) observe that "what the social scientist thinks of as
'objective investigation' the practitioner often takes as
'hostile attack.'" As Goodrich (1978, p. 632, emphasis in
original) suggests, "what has happened is that we have tried to
avoid the phenomenon of subjectivity in order to avoid the
charge of subjectivity." However, Patton (1978, p. 237) argues
that:

> The fundamental issue is whose values will bias the
> question, not whether or not questions will be
> biased. In a very real sense all questions are
> biased, but biased questions can be either open or
> loaded.

Meltsner (1976, p. 261) puts the matter nicely into
perspective:

> Trust is also nourished by the analyst's attempting
> to be objective. This does not mean that either the
> analyst or the analysis can be objective in an
> absolute sense. Both do have their values. What it

does mean is that the analyst should attempt to give as straight an answer as he can.

Some administrators perceive evaluation as a two-edged sword. The pretense of objectivity embues evaluation with credibility. The administrator who is confronted with an "unfavorable" result knows that any result can be attacked on several grounds. The administrator who is confronted with a "favorable" result may perceive the result as a weapon against adversaries. However, firm stances may not be taken until the results dictate them. To reduce some administrators' rather schizoid views of evaluation, and for the mutual benefit of all concerned,

> 4. Evaluators should acknowledge the subjective elements in their work, when these elements are unavoidable, and offer their work merely as informed but not omnipotent support for decision-making.

However, this recommendation must be implemented with care, because sometimes administrators misinterpret honest caveats as admissions of avoidable and serious evaluation flaws.

Evaluation and Politics

Although many evaluators are not comfortable admitting it, evaluation cannot avoid being a political activity: (Weiner, Rubin & Sachse, 1977, p. 19). As Patton (1978, p. 46) explains:

> The traditional academic values of many social scientists lead them to want to be nonpolitical in their research. Yet they always want to affect

government decisions. The evidence is that they cannot have it both ways.

Isaac (1980, p. 3) concurs:

> Programs that are politically conceived and implemented, are also sustained and defended politically. It seems the better part of wisdom neither to be surprised nor offended by this phenomenon.

According to Cohen (1972, p. 139), "to the extent that information is an instrument, basis, or excuse for changing power relationships within or among institutions, evaluation is a political activity." The implications of this situation have been identified by Dickey (1979, p. 3):

> Judgment has an awesome ring, and it is not surprising that those who are being judged feel anxious, even threatened. Add to this the political context in which the process takes place (and there ia always a political context) and we have all the ingredients for dysfunctional communication--high levels of stress lea'ing to communication patterns arising from indivi_ual defense mechanisms.

This does not mean that evaluators must themselves participate in political activity. However, as Meltsner (1976, p. 43) suggests, the effective evaluator "tries to understand political considerations and then to make them an integrated and explicit part of his analysis." According to Brown and Braskamp (1980, p. 93) "this means that the relationship between the evaluator and key program staff, and the evaluator's understanding of the organization in its internal and external poltical environment, are critical for successful utilization." This suggests that

> 5. Evaluators should understand the politics of
>   their agencies and attempt to meet the political
>   needs of involved persons whenever doing so
>   will not jeopardize the integrity of the
>   evaluation.

Evaluation and Empiricism

Some administrators have a stereotypic view of evaluators in which evaluators are perceived as "technicians." Meltsner (1976, p. 23) summarizes the sterotype thusly:

> Unlike the messenger of ancient times, the technician does not fear for his head when he has to bring bad news. No, he would not soften his findings; he would do "the best analytical job that can be done in conformity with the principles of economics [or his discipline]." He refers to his work as "honest analysis," and he complains about analysts having to provide justification for a decision that has already been made.

However, the evaluation features which are persuasive to administrators stand in stark contrast to what the technician will emphasize. As Leviton and Hughes (1979, p. 23) suggest, "administrators prefer qualitative information to the quantitative data that evaluators frequently supply."

Empirical research supports the view that administrators prefer qualitative information over quantitative information. Alkin's (1980b, p. 24) well-known naturalistic utilization studies yielded the conclusion that "little evidence was found in the case studies that research rigor was an important factor affecting utilization." Simulation research by Brown and Newman (in press) is even more dramatic regarding this point:

> The simple addition of an inferential statement, such as "these differences were statistically significant at the .05 level" however, resulted in lower levels of agreement [with policy recommendations]. In fact, for three of four recommendations, the inclusion of the inferential statement resulted in levels of agreement lower than in the No Data [experimental] condition.

However, it is important to note that the use of data does interact with other result features in determining audience reaction (Brown, Newman & Rivers, 1980, p. 72), so a simple interpretation of these results is not possible. Of course, some administrator disdain for empiricism is rational if we acknowledge that quantitative forms of representation "inherently are insensitive to some of the significant aspects of classroom life" (Eisner, 1980, p. 11).

This is not to suggest that evaluators should forego the quantitative aspects of their work; rather "the central message in this regard is that it is not enough to conduct methodologically sound research" (Johnson, 1978, p. 12).

> 6. Evaluators should emphasize both formative process evaluation data and summative product evaluation data in their work.

The two foci reinforce each other. The emphasis on process evaluation communicates both an understanding of program ecology and a commitment to program improvement; the previous discussion has suggested that these messages are essential. An emphasis on formative process data should then help make quantitative summative results more credible. Of course, quantitative data must still be presented in concrete and

understandable terms. Evaluators might also do well to be sure that they understand the meaning and limits of their inferential methods (Carver, 1978).

The Personal Factor

The reader may perceive that some of the preceding prescriptions speak to the personality of the evaluator. The perception is accurate. The literature makes clear that the most critical determinent of evaluation utilization is what Patton (1978) has termed "the personal factor." As Cronbach et al. (1980, p. 6) summarize, "nothing makes a larger difference in the use of evaluations than the personal factor--the interest of officials in learning from the evaluation and the desire of the evaluator to get attention for what he knows." Evaluators sensitive to this factor will respond in two ways. First, following the suggestion of Patton (1978), evaluators will identify the evaluation's relevant decision makers and information users, and they will continually work on effecting utilization throughout the course of the evaluation.

The second response suggested by the personal factor will aid this process. Several writers have noted the importance of good evaluator-client relations:

> The evidence on dissemination suggests that informal communication that cuts the red tape may enhance utilization, although quality of information may sometimes suffer and dissemination will be haphazard (Leviton & Hughes, 1979, p. 21).

> For while information is an essential resource for decision makers, the manner in which it is converted into policy is based as much or more on

interpersonal, organizational, and psychological
factors than on the actual information itself
(Guskin, 1980, p. 45).

Utilization is usually the result of the relationship
between the evaluator and the user more than anything
else. If the user knows and respects the evaluator,
utilization has its highest potential (Holley, 1979,
p. 8).

The major barriers to successful evaluation are not
technical and methodological, though these are
certainly important and worthy of further effort, but
are rather the structural constraints and
requirements and the interpersonal relationships
which characterize the evaluation endeavor (Gurel,
1975, pp. 27-28).

To be effective,

> 7. Evaluators must demonstrate to project personnel
> and administrators that they sincerely care about
> the needs of program staff and the program's
> clients.

An example may illustrate how this admonition can work in
practice. The first author was working in a local education
agency as an evaluator of a court-ordered magnet school
program. Since one of the program's functions was to promote
racial integration of students, each magnet school was charged
with actively recruiting students representing various ethnic
backgrounds. After several months of operation it became clear
that the staff of one project had deliberately avoided this
responsibility in order to gain time to get their program on
the ground. Although this decision was perfectly rational from
the perspective of the program's staff, in light of the
court-order this inactivity could have had serious implications
for the school district. If "breathing time" was required,
then the admissions phase of the program could be delayed, but

it was vital that recruiting activity begin as soon as possible so that lag times would be minimized.

Consequently, it was necessary to meet with the program director and the administrator who supervised the director. The evaluator took this position:

> This is a potentially serious matter which I must present in my next process evaluation report. But how can I help you? Since your program has academic admissions criteria, would you like me to analyze the district's computer tapes from the last system-wide testing and generate mailing labels for eligible students in the grade levels you serve? You could write them and invite them and their parents over to see what your program has to offer. This way when I discuss your recruiting activities I can point to concrete evidence that the situation is being corrected.

It was not technically the evaluator's job to generate mailing labels. However, actions like these are important because they communicate the evaluator's concern for the program and its clients.

The "personal factor" in part means that evaluators try not to be threatening and authoritative; how evaluators comport themselves affects the psychological frameworks with which administrators interpret evaluative information. This conclusion may discomfort some evaluators who believe that they offer objective truth which they believe should have intrinsic value independent of evaluator personality or approach. Nevertheless, administrators have their own paradigms for viewing th   these paradigms are rational to them, and evaluators   ot that the manner in which the evaluator

interacts with administrators and staff will affect the credibility which the administrators vest in subsequent evaluation results.

EVALUATION AND POLICY ANALYSIS

Between ten and twenty years ago educational thinkers struggled to conceptualize evaluation and evaluation models. As Thompson (1980, p. 59) notes, "full consensus on these [conceptual] issues has certainly not emerged, but there does appear to be general agreement among theorists that evaluation is a process of providing information for decision-making, and that ultimately evaluation implies value judgments of worth." The conceptual distinction between "evaluation" and "policy analysis," however, has not yet been so completely resolved. There is some recognition in the literature that these two processes can be much the same thing, although some evaluation models imply "preoccupation with existing programs" and some policy analysis models "usually compare existing and hypothetical alternative program solutions" (Wholey, Scanlon, Duffy, Fukumoto & Vogt, 1970, pp. 23-24, emphasis in original).

If evaluation is not a purely objective, purely empirical enterprise, then it is more reasonable to expect evaluators to consider policy alternatives in their work. Haller (1974, p. 403) observes that "evaluation problems concern decisions. Decisions presume the existence of alternatives, and so the purpose of evaluation is to help delineate alternatives and to provide information to help decision makers arrive at more

rational choices." However, Weiss (1979, p. 3) notes that many evaluators are not policy oriented; "evaluators do not always--or even often--come up with data that give explicit guidance for action." As Zepeda (1980, p. 1) notes, this situation is not entirely satisfactory: "Informing local decision makers that the local Title-I program is not effective does not give them the information that they need to improve it." The consequences of this situation are explained by Deal and Rallis (1980, p. 210): "By only describing in a controlled form what already exists, scientific research does not directly promote learning for the craftsman. It might even help to maintain the status quo."

Some empirical research indicates that evaluators do make policy recommendations. For example, Alkin, Kosecoff, Fitz-Gibbon, and Seligman (1974, p. 19) found that "thirty-nine of the 42 evaluators made recommendations for project modification." But this result contradicts other research (Goldberg, 1978, p. 16) which found that administrators do not perceive evaluation to be too helpful in "finding possible courses of action and choosing among alternative courses of action." This analysis suggests that, in evaluation reports, "reasonable alternatives must be provided. Such alternatives have a good chance of being tried when provided" (Ingison, 1979, p. 4). In short, evaluation might be more effective if it became more like policy analysis.

Isaac Assimov (1972) has written a short story which illustrates the psychology of this situation. A young scientist proves mathematically than an energy policy is going to result in the destruction of the universe. However, no one will believe his proof until decades later a mechanism for still generating huge quantities of energy without destroying the universe is also presented. The morale is that administrators may be more likely to act on evaluation information when they are presented with some policy alternatives to consider.

Will administrators perceive recommendations as an unwarranted intrusion into the policy arena? They will if the evaluator's offerings take the form of grandiose schemes. They may not if specific policy alternatives are mentioned and the evaluator merely presents objective evidence, both pro and con, regarding the best predictions about likely program impacts. Some evaluators perceive administrators as being very jealous of their turf. In some cases these perceptions are fully justified. But many administrators do not feel threatened by good ideas and will take their wisdom where ever they can get it, especially if they believe that the recommendations are being offered in a sincere attempt to help as against being offered in a sincere attempt to be Machiavellian. However, as Newman and Brown's (1980) results indicate, the utility of this effort will partly be determined by the situation-specific personalities and needs of the involved administrators.

CRITIQUE OF PREVIOUS USE RESEARCH

The previous research on the use of evaluative information has been dominated by two research approaches. There have been several reports of a limited number of case studies which have not been theoretically grounded (cf. Alkin, Daillak & White, 1979). The other scenario of studies involves simulation investigations which at least purport to be grounded in communications or attribution theory (cf. Newman, Brown & Braskamp, 1980, pp. 29-36). Simulation research typically presents administrators with a "simulated" evaluation report in which different report features, i.e., the sex of the evaluator, are varied and the impacts of the variations are then assessed. Both research traditions have made major contributions to our understanding of the use of evaluative information. However, both scenarios have weaknesses which should be avoided in future use research.

Alkin (1979, p. 13) has consistently argued that

> The forces which lead to utilization are indeed complex. This complexity in combination with our current inadequate understanding of evaluation and utilization requires a methodological procedure sufficiently sensitive to capture the nuances involved--naturalistic research is currently a most apporopriate tool for a study of evaluation utilization.

Alkin, Daillak, and White (1979, p. 32, emphasis in original) are less restrained elsewhere when they argue that "the choice of appropriate research strategies can be reduced to one class: naturalistic research methods." However, this case study work can be criticized on at least three grounds.

First, there is theory, or at least the beginnings of theory, which can be relied upon in conducting use research. Our understanding of evaluation is reflected in fairly elaborate conceptualizations of types of use, and in the conceptualizations of "types" of evaluators which Meltsner (1976) has offered. It is also fairly clear that communication-related theories can greatly enhance our understanding of at least the reporting phase of the evaluation endeavor (Brown & Newman, 1979b). These theoretical frames are certainly not yet fully developed, but further progress in developing theory absolutely depends upon our testing and elaborating the constructs which we already have at our disposal. Thus, failure to theoretically ground naturalistic research seems unnecessary and unfortunate (Thompson, in press-b).

Second, most of the case study research has been based on post hoc interviews with evaluators and evaluation clients. Leviton and Hughes (1979, p. 15) have commented on the dangers of restrospective research methods:

> Given officials' faulty memories, retrospective research may be biased in favor of a few, dramatic instances of use, rather than frequent but modest ones.

Retrospective methods are economical, but their limitations must be acknowledged.

Third, some case study research can be criticized for the way it has been reported. Although some authors (Meltsner, 1976; Patton, 1978) have integrated themes and case study evidence into a persuasive and incisive analysis, some researchers have presented case study evidence in non-integrated blocks of detail absent any themes. Thus some naturalistic research represents a poor return on investment. Ironically, if an evaluator communicated evaluative data as poorly as some case study research has been communicated the evaluative information would never be used.

The simulation research can also be criticized on three grounds. First, although this research is typically represented as being theoretically grounded in communications or attribution theory, this grounding has too frequently taken the form of "name dropping" the theory's title without invoking specific propositions of the cited theories. This is unfortunate since these theories do incorporate reasonably specific propositions about phenomena (see Davis & Salasin, 1975, p. 641). An example proposition is offered by Thompson (1971, p. 185) who argues that communicators should "provide rationalizations for listeners who are unwilling to admit that socially disapproved motives are responsible for their beliefs or actions."

A second criticism of the simulation research is that some investigators have used "samples of convenience" in their work. It is unlikely that the business majors or education students

who happen to enroll in graduate courses are representative of the administrators to whom the researchers sometimes attempt to generalize. This criticism is independent of and probably more telling than the recognition of some researchers (cf. Brown & Newman, 1979a, pp. 6-7) that simulation research may not perfectly generalize to natural ecologies.

Third, simulation research may be criticized on the grounds that it typically focuses on the report phase of evaluation and we know that "what happens before the final report is written will usually determine utilization" (Patton, 1978, p. 266). Still, it must be acknowledged that if we really want to optimize evaluation use then it may be necessary to emphasize all phases of the evaluation endeavor, including those which are relatively less important in determining use.

A RESEARCH AGENDA FOR THE FUTURE

Despite dramatic progress in achieving understanding of use phenomena, much remains to be learned. Several priorities for a research agenda can be identified:

1. Prospective case studies of use should be a high priority for future research. Connor (1979, p. 16) makes this point quite well:

> The absence of studies with a "current" time orientation is a serious missing link in the utilization research chain... This orientation is essential if we are to obtain the most accurate information about utilization. Retrospective studies, while useful, are subject to biases directly related to the type of use which has occurred.

2. Researchers need to determine whether or not school

personnel can effectively be trained to make more optimal use of evaluative information. For example, research is needed to determine if it is feasible to help administrators increase "problem solving capabilities and ability to express and articulate [information] needs" (Haenn, 1980, p. 13). Training of LEA evaluation staff members should also be explored, since "there is a striking absence of any formal training in evaluation for staff" (Lyon, Doscher, McGranahan & Williams, 1978, p. 70).

For example, will training in the communications and rhetorical traditions involving such matters as a fortiori logic help evaluators be more effective? Quade (1964, p. 173) explains this logic:

> To make an analysis a fortiori, we bend over backward in making the comparisons to "hurt" the system we think is best and to "help" the alternative system. If it then turns out that after we have done this we can still say we prefer the handicapped system, we are in a strengthened position to make [policy] recommendations.

3. Further insight into how evaluators perceive themselves and are perceived by administrators is needed, if we accept that the personal factor is a critical determinant of use. Some research of this sort has been conducted (cf. Thompson, in press-a), but we need a broader understanding of these perceptions similar to that which has been achieved in disciplines such as teacher education (Miller, Thompson & Frankiewicz, 1975).

4. More use research which focuses on principals and teachers
    as users is needed. Several researchers have involved
    persons in these roles as subjects (cf. Thompson, 1981),
    but the use of persons in these roles as subjects is not
    in proportion to the influence which these individuals
    exert over program operation. For example, regarding
    principals, Lipham (1980, p. 83) notes that "the
    leadership behavior of the principal is a powerful factor
    which influences the adoption and institutionalization of
    an educational change."

5. As radical as it may sound, research on the merits of
    mandated evaluation is also needed. Do programs which are
    not evaluated differ from comparable evaluated programs
    regarding either program processes or productivity? At
    some point the notion of mandated evaluation itself needs
    to be evaluated.

MAKING UTILIZATION HAPPEN

Persons who discuss evaluation use tend to lay the blame
for non-use at someone else's doorstep. However,
administrators must assume some responsibility for making sure
that evaluative information is usable and used (Meltsner,
1976). So too evaluators must accept some responsibility for
making use happen. As Polivka and Steg (1978, p. 697) argue:

> Traditionally, the evaluator has been very hesistant
> to claim any responsibility for the use of his/her
> findings. This approach has helped make it very easy
> to ignore evaluation results.

Both administrators and evaluators need to recognize that the responsibility for use is not a "zero-sum game" in which responsibility can be divided up and will always total to 100%. We would be better off if <u>both</u> administrators and evaluators assumed 60 or 80% of the responsibility for optimizing use. Even then, as Patton (1978, p. 96) notes, "increasing utilization potential does not guarantee utilization of findings. There are no guarantees."

REFERENCES

Alkin, M.C. The title of this speech is.... Paper presented
     at the annual meeting of the California Educational
     Research Association, Burlingame, CA, 1976. (ERIC
     Document Reproduction Service No. ED 160 652)

Alkin, M.C. Using naturalistic research for the study of
     evaluation utilization. Paper presented at the annual
     meeting of the American Educational Research Association,
     San Francisco, 1979. (ERIC Document Reproduction Service
     No. ED 170 378)

Alkin, M.C. Improving Title I technical assistance: An
     evaluation utilization perspective. Paper presented at
     the annual meeting of the American Educational Research
     Association, Boston, 1980. (a)

Alkin, M.C. Naturalistic study of evaluation utilization. In
     L.A. Braskamp & R.D. Brown (Eds.), Utilization of
     evaluative information. San Francisco: Jossey-Bass,
     1980. (b)

Alkin, M.C., & Daillak, R.H.   A study of evaluation
     utilization. Educational Evaluation and Policy Analysis,
     1979, 1, 41-49.

Alkin, M.C., Daillak, R.H., & White, P. Using evaluations:
     Does evaluation make a difference?. Beverly Hills: Sage
     Publications, 1979.

Alkin, M.C., & Kosecoff, J.B. A new eclectic model for the
     redirection of evaluation efforts. Paper presented at the
     annual meeting of the American Educational Research
     Association, New Orleans, 1973.

Alkin, M.C., Kosecoff, J.B., Fitz-Gibbon, C., & Seligman, R.
     Evaluation and decision-making: The Title VII experience.
     CSE Monograph Series in Evaluation, 1974, No. 4.

Andrews, J.V. Reactions to program evaluation: A qualitative
     analysis (Doctoral dissertation, Cornell University,
     1979). Dissertation Abstracts International, 1979, 39,
     6717A. (University Microfilms No. 79-10,731)

Assimov, I. The gods themselves. New York: Doubleday, 1972.

Brandl, J.E. Policy evaluation and the work of legislatures.
     In L.A. Braskamp & R.D. Brown (Eds.), Utilization of
     evaluative information. San Francisco: Jossey-Bass,
     1980.

Braskamp, L.A. Assessing the utilization of a program evaluation or review. Paper presented at the conference, Planning and Conducting Program Evaluations and Reviews in Higher Education, St. Petersburg, 1980.

Braskamp, L.A., & Brown, R.D. (Eds.). Utilization of evaluative information. San Francisco: Jossey-Bass, 1980.

Braskamp, L.A., Brown, R.D., & Newman, D.L. Credibility of a local educational program evaluation report: Author source and client characteristics. American Educational Research Journal, 1978, 15, 441-450.

Brickell, H.M., Aslanian, C.B., & Spak, L.J. Data for decisions: An analysis of evaluation data needed by decision-makers in educational programs. New York: Policy Studies in Education, 1974.

Brown, E.K. Changes in school management's needs for evaluation information. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, 1973. (ERIC Document Reproduction Service No. ED 074 094)

Brown, R.D. The evaluator as artist: Primitive, impressionistic, or paint-by-number? CEDR Quarterly, 1980, 13, 4-6.

Brown, R.D., & Braskamp, L.A. Summary: Common themes and a checklist. In L.A. Braskamp & R.D. Brown (Eds.), Utilization of evaluative information. san Francisco: Jossey-Bass, 1980.

Brown, R.D., & Newman, D.L. Communication theory as a paradigm for making evaluation reports more effective. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. (a)

Brown, R.D., & Newman, D.L. A schematic approach to studying evaluation utilization. Paper presented at the annual meeting of the Evaluation Research Society, Minneapolis, 1979. (b)

Brown, R.D., & Newman, D.L. An investigation of the effect of different data presentation formats and order of arguments in a simulated adversary evaluation. Educational Evaluation and Policy Analysis, in press.

Brown, R.D., Newman, D.L., & Rivers, L. Perceived need for evaluation as an influence on evaluator's impact on decision-making. Educational Evaluation and Policy Analysis, 1980, 2, 67-73.

Caplan, N. What do we know about knowledge utilization? In
    L.A. Braskamp & R.D. Brown (Eds.), Utilization of
    evaluative information. San Francisco: Jossey-Bass,
    1980.

Carver, R.P. The case against statistical significance
    testing. Harvard Education Review, 1978, 48, 378-399.

Cohen, D.K. Politics and research: Evaluation of social
    action programs in education. In C.H. Weiss (Ed.),
    Evaluating social action programs: Readings in social
    action and education. Boston: Allyn & Bacon, 1972.

Conner, R.F. Measuring the utilization of evaluation findings:
    Description and critique of different techniques. Paper
    presented at the annual meeting of the Evaluation Research
    Society, Minneapolis, 1979.

Cook, T.D. Sesame Street and the medical and tailored models
    of summative evaluation research. In J.G. Abert &
    M. Kamrass (Eds.), Social experiments and social program
    evaluation. Cambridge: Ballinger, 1974.

Cook, T.D. Utilization, knowledge-building, and
    institutionalization: Three criteria by which evaluation
    research can be evaluated. In T.D. Cook et ' (Eds.),
    Evaluation studies review annual (Vol. 3). Be. Hills:
    Sage Publications, 1978.

Cronbach, L.J., Ambron, S.R., Dornbusch, S.M., Hess, R.D.,
    Hornik, R.C., Phillips, D.C., Walker, D.F., & Weiner, S.S.
    Toward reform of program evaluation. San Francisco:
    Jossey-Bass, 1980.

Daillak, R.H., Alkin, M.C., & White, P. Studies of school
    evaluation practice. Paper presented at the annual
    meeting of the American Educational Research Association,
    Toronto, 1978. (ERIC Document Reproduction Service
    No. ED 170 345)

Datta, L. The new Congressionally mandated studies: Notes
    toward species identification. Paper presented at the
    annual meeting of the American Educational Research
    Association, Toronto, 1978. (ERIC Document Reproduction
    Service No. ED 156 850)

Datta, L. O thou that bringest the tidings to lions:
    Reporting the findings of educational evaluations. Paper
    presented at the annual Johns Hopkins University National
    Sysmposium on Educational Research, Baltimore, 1979.

Davis, H.R., & Salasin, S.E. The utilization of evaluation.
    In E.L. Struening & M. Guttentag (Eds.), Handbook of
    evaluation research (Vol. 1). Beverly Hills: Sage, 1975.

Deal, T.E., & Rallis, S.F. Promoting interaction among producers and users of educational knowledge. In Interorganizational arrangements for collaborative efforts. Portland, OR: Northwest Regional Educational Laboratory, 1980.

Dickey, B. Effective problem-solving for evaluation utilization. Paper presented at the annual meeting of the Evaluation Research Society, Minneapolis, 1979.

Eisner, E.W. Forms of representation in educational evaluation. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980.

Fletcher, J.L. A model for data-based school improvement. Paper presented at the annual meeting of the American Educational Research Association, Chicago, 1972. (ERIC Document Reproduction Service No. ED 065 586)

Fullan, M. Conceptualizing problems of curriculum implementation. Paper presented for the Symposium on Curriculum Inquiry in Canada, Victoria, 1979.

Fullan, M. An R&D prospectus for educational reform. In Interorganizational arrangements for collaborative efforts. Portland, OR: Northwest Regional Educational Laboratory, 1980.

Goldberg, M. New York City program administrators' perceptions of the helpfullness of outside mandated evaluations on administrative decision-making in ESEA programs. Paper presented at the annual meeting of the American Educational Research Association, Toronto, 1978. (ERIC Document Reproduction Service No. ED 156 720)

Goodrich, T.J. Strategies for dealing with the issue of subjectivity in evaluation. Evaluation Quarterly, 1978, 2, 631-645.

Gorham, W. Getting into action. Policy Sciences, 1970, 1, 169-176.

Granville, A.C. An experimental study of factors that influence school decisions: Implications for evaluation. Paper presented at the annual meeting of the American Educational Research Association, New York, 1977. (ERIC Document Reproduction Service No. ED 139 824)

Granville, A.C. The impact of the project developmental continuity evaluation. In A.C. Granville, J.M. Love, R.D. Matz, L.J. Schweinhart, & A.G. Smith (Eds.), The impact of evaluation: Lessons drawn from the evaluations of five Early Childhood education programs. Proceedings of a symposium presented at the annual meeting of the American Educational Research Association, Toronto, 1978.

(ERIC Document Reproduction Service No. ED 166 212)

Guba, E.G. An overview of the evaluation problem. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1969. (ERIC Document Reproduction Service No. ED 031 814)

Guba, E.G., & Stufflebeam, D.L. Evaluation: The process of stimulating, aiding, and abetting insightful action. Bloomington: Indiana University, 1970. (ERIC Document Reproduction Service No. ED 055 733)

Gurel, L. The human side of evaluating human service programs: Problems and prospects. In M. Guttentag & E.L. Struening (Eds.), Handbook of evaluation research (Vol. 2). Beverly Hills: Sage, 1975.

Guskin, A.E. Knowledge utilization and power in university decision making. In L.A. Braskamp & R.D. Brown (Eds.), Utilization of evaluative information. San Francisco: Jossey-Bass, 1980.

Guttentag, M., & Struening, E.L. The handbook: Its purpose and organization. In M. Guttentag & E.L. Struening (Eds.), Handbook of evaluation research (Vol. 2). Beverly Hills: Sage, 1975.

Haenn, J.F. Reasons why evaluations and testing don't inform. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. (ERIC Document Reproduction Service No. ED 187 733)

Hall, G., & Loucks, S. A developmental model for determining whether the treatment is actually implemented. American Educational Research Journal, 1977, 14, 263-276.

Haller, E. Cost analysis for educational program evaluation. In W.J. Popham (Ed.), Evaluation in Education. Berkeley: McCutchan, 1974.

Hamilton, G.E. Title I evaluation from the perspective of the local school. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980.

Havelock, R.G. Dissemination and translation roles. In T.L. Eidell & J.M. Kitchel (Eds.), Knowledge Production and Utilization in Educational Administration (Columbus, Ohio) and Center for the Advanced study of Educational Administration (Eugene, Oregon) Career Development Seminar, October, 1967. Eugene, OR: University of Oregon Press, 1968.

Hayman, J. The case for internal linkage: Functional integration within the organization. Paper presented at the annual meeting of the American Educational Research Association, San francisco, 1979.

Holley, F. Catch a falling star: Promoting the utilization of research and evaluation findings. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979.

House, E.R. School evaluation: The politics and process. Berkeley: McCutchan, 1973.

Ingison, L.J. Some realities and constraints regarding the use and usefullness of policy-relevant evaluations. Paper presented at the annual meeting of the Evaluation Research Society, Minneapolis, 1979.

Isaac, S. Increasing the relevance of national evaluation to schools: A school district's viewpoint. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980.

Johnson, M.D. Evaluation as a model for decision-oriented research. Paper presented at the Association for Institutional Research Annual Forum, 1978. (ERIC Document Reproduction Service No. ED 154 743)

Johnston, J. What we know about the researcher and research methods in evaluation. Paper presented at the annual meeting of the American Educational Research Association, Toronto, 1978.

Kelezo, G.J. Program evaluation: Emerging issues of possible legislative concern relating to the conduct and use of evaluation in the Congress and executive branch. Washington, D.C.: Congressional Research Service, Library of Congress, 1974.

Kilbourne, R., & DeGracie, J. The use of L.E.A. research at the local level: The picture of a dropout. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979.

King, J.A., Thompson, B., & Pechman, E.M. Evaluation utilization: A bibliography. New Orleans: Orleans Parish Public Schools, 1981.

Knorr, K.D. Policymakers' use of social science knowledge: Symbolic or instrumental? In C.H. Weiss (Ed.), Using social research in public policymaking. Lexington, MS: Heath, 1977.

Law, A. In M.C. Alkin & A. Law, A conversation cn evaluation
    utilization. Educational Evaluation and Policy Analysis,
    1980, 2, 73-79.

Lenihan, K.J. Telephones and raising bail: Some lessons in
    evaluation research. Evaluation Quarterly, 1977, 1,
    569-586.

Leviton, L.C., & Hughes, E.F.X. Utilization of evaluations: A
    review and synthesis. Evanston, IL: Center for Health
    Services and Policy Research, Northwestern University,
    1979.

Lipham, J.M. Change agentry and school improvement: The
    principal's role. In Interorganizational arrangements for
    collaborative efforts. Portland, OR: Northwest Regional
    Educational Laboratory, 1980.

Lyon, C.D., Doscher, L., McGranahan, P., & Williams, R.
    Evaluation and school districts. Los Angeles: Center for
    the Study of Evaluation, 1978.

McLean, L.D. The chastening of educational research. Ontario:
    Onta-io Institute for Studies in Education, 1979.

Mathis,   The use of state assessment data as a response and
    generator of educational policy. Paper presented at the
    annual meeting of the American Educational Research
    Association, Boston, 1980.

Matuszek, P., & Holley, F. Evaluation for decision-making: A
    case study. Paper presented at the annual meeting of the
    American Educational Research Association, New York, 1977.
    (ERIC Document Reproduction Service No. ED 137 402)

Meltsner, A.J. Policy analysts in the bureaucracy. Berkeley:
    University of California Press, 1976.

Miller, A.H., Thompson, B., & Frankiewicz, R.G. Attitudes of
    teacher education students toward teachers. Paper
    presented at the annual meeting of the American
    Educational Research Association, Washington, D.C., 1975.
    (ERIC Document Reproduction Service No. ED 104 887)

Mitchell, D.E. Social science impact on legislative
    decision-making: Process and substance. Paper presented
    at the annual meeting of the American Educational Research
    Association, Boston, 1980. (ERIC Document Reproduction
    Service No. ED 186 347)

Newman, D., & Brown, R.D. An exploratory investigation of
    decision-making style and locus of control as factors
    related to choice of school evaluation strategies. Paper
    presented at the annual meeting of the American
    Educational Research Association, Boston, 1980.

Newman, D.L., Brown, R.D., & Braskamp, L.A. Communication theory and the utilization of evaluation. In L.A. Braskamp & R.D. Brown (Eds.), Utilization of evaluative information. San Francisco: Jossey-Bass, 1980.

Novak, C.D. An involvement approach to the evaluation of local district programs. Paper presented at the annual meeting of the American Educational Research Association, New York, 1977. (ERIC Document Reproduction Service No. ED 152 819)

Orlandi, L.R., & Consalve, R.W. Blaming the victim of evaluation. CEDR Quarterly, 1977, 10, 3; 7.

Patton, M.Q. Utilization focused evaluation. Beverly Hills: Sage, 1978.

Polivka, L., & Steg, E. Program evaluation and policy development: Bridging the gap. Evaluation Quarterly, 1978, 2, 696-707.

Quade, E.S. Analysis for military decisions (R-387-PR). Santa Monica: Rand Corporation, 1964.

Raizen, S.A. Introductory comments. In A.C. Granville, J.M. Love, R.D. Matz, L.J. Schweinhart, & A.G. Smith (Eds.), The impact of evaluation: Lessons drawn from the evaluations of five early childhood education programs. Proceedings of a symposium presented at the annual meeting of the American Educational Research Association, Toronto, 1978. (ERIC Document Reproduction Service No. ED 166 212)

Randall, R.S. Knowledge about decision processes and information. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1969. (ERIC Document Reproduction Service No. ED 031 814)

Revicki, D., & Rubin, R. Models for measuring program implementation: A review and critique. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980.

Rich, R.F. Uses of social science information by federal bureaucrats: Knowledge for action versus knowledge for understanding. In C.H. Weiss (Ed.), Using social research in public policymaking. Lexington, MS: Heath, 1977.

Rippey, R.M. Studies in transactional evaluation. Berkeley: McCutchan, 1973.

Ross, J.A. Decision rules in program evaluation. Evaluation Review, 1980, 4, 59-74.

Rossi, P.H. Booby traps and pitfalls in the evaluation of
    social action programs. In C.H. Weiss (Ed.), Evaluating
    action programs: Readings in social action and education.
    Boston: Allyn & Bacon, 1972.

Rutman, L. Barriers to the utilization of evaluation research.
    Paper presented at the annual meetirg of the Society for
    the Study of Social Problems, Chicago, 1977.

Saks, M.J. The utilization of evaluation research in
    litigation. In L.A. Braskamp & R.D. Brown (Eds.),
    Utilization of evaluative information. San Francisco:
    Jossey-Bass, 1980.

Shapiro, E. Educational evaluation: Rethinking the criteria
    of competence. School Review, 1973, 81, 523-549.

Shapiro, J. Assessing the impact of evaluation: A univariate
    time series technique. Paper presented at the annual
    meeting of the American Educational Research Association,
    San Francisco, 1979. (ERIC Document Reproduction Service
    No. ED 174 689)

Simon, H.A. Administrative behavior. New York: Macmillan,
    1957.

Stake, R. Evaluation design, instrumentation, data collection,
    and analysis of data. In B.R. Worthen & J.R. Sanders
    (Eds.), Educational evaluation: Theory and practice.
    Worthington, OH: Charles A. Jones, 1973.

Steele, S.M. Contemporary approaches to program evaluation.
    Washingtcn, D.C.: Education Resources Division of Capitol
    Publications, 1973.

Stevens, W.F., & Tornatzky, L.G. The dissemination of
    evaluation; an experiment. Evaluation Review, 1980, 4,
    339-354.

Stevenson, J.F. Evaluation utilization in human service
    organizations: Is there a role for the in-house evaluator
    in assisting utilzation? Paper presented at the annual
    meeting of the Evaluation Research Society, Minneapolis,
    1979.

Stufflebeam, D.I., Foley, W.J., Gephart, W.J., Guba, E.G.,
    Hammond, R.L., Merriman, H.D., & Provus, M.M. Educational
    evaluation and decision making. Itasca, IL: Peacock,
    1971.

Suchman, A.E. Action for what? A critique of evaluation
    research. In C.H. Weiss (Ed.), Evaluating action
    programs: Readings in social action and education.
    Boston: Allyn & Bacon, 1972.

Thompson, B. Evaluator "types:" A case study. CEDR Quarterly, in press. (a)

Thompson, B. Review of Utilization of evaluative information by L.A. Braskamp & R.D. Brown. Educational Evaluation and Policy Analysis, in press. (b)

Thompson, B. Administrators' perceptions of various evaluation report styles. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981.

Thompson, B. Validity of an evaluator typology. Educational Evaluation and Policy Analysis, 1980, 2, 59-65.

Thompson, W.N. Modern argumentation and debate. New York: Harper & Row, 1971.

Tittle, C.K. Evaluation and decision making: Developing a method to link program funding decisions and outcome evaluation. Paper presented at the annual meeting of the American Educational Research Association, Toronto, 1977.

Weiner, S.S., Rubin, D., & Sachse, T. Pathology in institutional structures for evaluation and a possible cure. Stanford, CA: Stanford Evaluation Consortium, 1977.

Weiss, C.H. Utilization of evaluation: Toward comparative study. In C.H. Weiss (Ed.), Evaluating action programs: Readings in social action and education. Boston: Allyn & Bacon, 1972.

Weiss, C.H. (Ed.). Using social research in public policy making. Lexington, MS: Lexington Books, 1977.

Weiss, C.H. Conceptual issues in measuring the ut.lization of research and evaluation. Paper presented at the annual meeting of the Evaluation Research Society, Minneapolis, 1979.

Wholey, J.S., Scanlon, J., Duffy, H., Fukumoto, J., & Vogt, L. Federal evaluation policy: Analyzing the effects of public programs. Washington, D.C.: The Urban Institute, 1970.

Wilensky, H.L., & Lebeaux, C.N. Industrial society and social welfare. New York: Russell Sage, 1958.

Williams, W., & Elmore, R.F. Social program implementation. New York: Academic Press, 1976.

Williams, W. & Evans, J.W. The politics of evaluation: The case of Head Start. Annals of the American Academy of Political and Social Science, 1969, 385, 118-132.

Wise, R.I. What we know about the decision-maker and decision
    settings. Paper presented at the annual meeting of the
    American Educational Research Association, Toronto, 1978.

Wise, R.I. The evaluator as educator. In L.A. Braskamp &
    R.D. Brown (Eds.), Utilization of evaluative information.
    San Francisco: Jossey-Bass, 1980.

Worthen, B.R., & Sanders, J.R. Educational evaluation: Theory
    and practice. Worthington, OH: Charles A. Jones, 1973.

Young, C.J., & Comptois, J. Increasing Congressional
    utilization of evaluation. In F. Zweig (Ed.), Evaluation
    in legislation. Beverly Hills: Sage, 1979.

Zepeda, R.A. What the models cannot tell us: Information
    needs for program planning. Paper presented at the annual
    meeting of the American Educational Research Association,
    Boston, 1980.